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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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MYERS BIGEL SIBLEY & SAJOVEC, P.A. P.O. BOX 37428 RALEIGH, NC 27627				
			EXAMINER BELIVEAU, SCOTT E	
			ART UNIT	PAPER NUMBER
			2614	

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/028,153	Applicant(s) WATSON ET AL.	
	Examiner Scott Beliveau	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
4. Claims 1, 2, 6-8, 14-16, and 19 rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis (US Pat No. 6,766,526 B1) in view of Ellis et al. (WO 99/60790 A1).

In consideration of claims 1, 16, and 19, the Ellis ('526) reference discloses a "system" further comprising a "computer readable medium" so as to implement a "method for content transmission network selection in a system coupled in parallel through both of a broadcast

network and a broadband network” [20] to a “viewer location” [22] wherein the “broadcast network and the broadband network are different” (Figures 1 and 12; Col 3, Line 10 – Col 29; Col 10, Line 13-43). The reference, however, is silent with respect to particular features corresponding to the ordering of video programming to be subsequently delivered. In a related art pertaining to the interactive video distribution services, the Ellis et al. (‘790) reference discloses a video-on-demand distribution system.

As illustrated in Figure 2, the system comprises a “processor” [29] or video server implicitly comprising a “memory having stored therein computer executable instructions” so as to control and coordinate the routing and delivery of selected programming to the requestor’s location (Page 11, Lines 7-19). The method by which programming is delivered comprises “identifying video program content to be transmitted based on at least one transmission request” (Page 22, Line 18 – Page 23, Line 16) whereupon the system “selects one of the broadcast network or a broadband network” [32] for “transmission of the video programming content to the viewer location . . . based upon characteristics of the transmission request comprising a future time at which the video programming content is requested to be viewed . . . [and] at least in part on an option of delivering the video programming content either at a time that the request is received” (ex. start/view now) or “at the future time” (Page 23, Line 17 – Page 24, Line 10). For example, in response to the user’s request for a program the system subsequently determines to send the program based upon availability to the user using the available cable network [32]. The system subsequently “transmits the video programming content on the selected one of the broadcast network or the broadband network” [32] to the “viewer location” [30] (Page 2, Lines 3-16;

Page 11, Lines 7-19; Page 25, Lines 28-32). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made so as to modify the parallel transmission path video distribution network and reception network using the teachings of Ellis ('790) for the purpose of providing a means to further provide a program guide system with improved capabilities for viewing and selecting television programs (Ellis et al. ('790): Page 3, Lines 22-30).

Claim 2 is rejected wherein the "step of identifying content to be transmitted based on at least one transmission request comprises transmitting a list of available content items over the broadband network" and "receiving from a broadband network requests for content items" in connection with ordering the requested video-programs (Ellis et al. ('790): Page 13, Line 7 – Page 14, Line 4).

Claims 6 and 7 are rejected wherein the "broadcast network comprises one of a direct to home satellite network, a terrestrial wireless network, and a cable network" and the "broadband network comprises one of a digital subscriber line network and a cable network" (Ellis ('526): Col 3, Lines 34-58).

Claim 8 is rejected wherein "said characteristics of the transmission request further comprise at least one of . . . a dollar amount the viewer is willing to pay for the content" (Ellis et al. ('790): Page 23, Lines 3-16; Page 24, Lines 4-10).

In consideration of claims 14 and 15, the Ellis et al. ('790) reference discloses that the "step of transmitting the content on one of the broadcast network . . . comprises transmitting the content on one of the broadcast network . . . at a time prior to the future time at which the content is requested to be viewed" and comprises "transmitting the content on one of the

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broadcast network . . . at the future time at which the content is requested to be viewed”

(Page 24, Lines 4-10). For example, a requested video program may be partially sent prior to the start time at which point the remaining portion of the video program must be sent at the requested future time in order to enable the viewer to watch the entire presentation.

5. Claims 9-11 and 22-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis (US Pat No. 6,766,526 B1), in view of Ellis et al. (WO 99/60790 A1), and in further view of Rai et al. (US Pat No. 6,438,110).

In consideration of claims 9-11 and 22-24, the combined Ellis references while teaching the particular usage of a plurality or combination of distribution networks do not particularly teach the selection is further based upon a plurality of additional criteria as claimed. In a related art pertaining to heterogeneous network determination for the delivery of information over a plurality of networks, the Rai et al. reference discloses making a determination so as to utilize a “broadcast network or a broadband network based upon characteristics of the transmission request comprising a future time” and “at least one of the . . . characteristics of the content to be transmitted . . . “ wherein the “characteristics of the content to be transmitted comprise at least one of . . . duration of the content” (Rai et al.: Figures 2-3; Col 5, Lines 48-61; Col 6, Line 30 – Col 7, Line 6; Col 7, Line 35 – Col 8, Line 11).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made so as to modify the combined Ellis references so as to further utilize the network determination functionality of Rai et al. for the purpose of providing a means by which to advantageously manage and allocate resources in a communication network

comprising a plurality of links or “networks” for scheduled events in order to ensure the high-quality delivery of services (Rai et al.: Col 1, Line 34 – Col 2, Line 6).

Claims 25, 27, and 29 are rejected in view of the combined references for the implicit scenario wherein the user of the Ellis et al. (‘790) submits a “first transmission request” for a “first programming content” (ex. “The Truman show”) and at a later point in time submits a “second transmission request” for a “second video content” (ex. “X-Files The Movie”). The combined Ellis references provide heterogeneous distribution network comprising both a “broadcast” and a “broadband network”. The Rai et al. reference discloses that the particular selection of a particular network including both “broadcast” and a “broadband networks” wherein the particular selection between networks depends on the scheduled time of the request. Taken in combination, the Rai et al. reference teaches that the particular of scheduling of video programming occurs using either of the “broadband” or “broadcast networks” of the combined Ellis references in order to optimally deliver resources using the available networks. Accordingly, the claimed subject matter “wherein the video programming content comprises first video programming content, wherein the transmission request comprises a first transmission request, and wherein selecting one of the broadcast network or the broadband network comprises selecting the broadcast network . . . further comprises identifying second video programming content to be transmitted based on a second transmission request wherein the first and second transmission requests are different; selecting the broadband network for transmission of the second video programming content based upon characteristics of the second transmission request comprising a second future time at which the second video programming content is requested to be viewed, the selection

of the broadband network being based at least in part on an option of delivering the second video programming content either at a time that the second request is received or at the future time; and transmitting the second video programming content on the broadband network” is considered met.

Claims 26, 28, and 30 are rejected in light of the aforementioned wherein the “transmitting the first video programming content on the broadcast network comprises transmitting the first video content on the broadcast network without using the internet” and “transmitting the second video programming content on the broadband network comprises transmitting the second video programming content on the broadband network including the Internet” (Ellis (‘526): Col 3, Lines 46-58).

6. Claims 12, 13, 18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis (US Pat No. 6,766,526 B1), in view of Ellis et al. (WO 99/60790 A1), in view of Rakib et al. (US Pat No. 6,889,385 B1).

In consideration of claims 12, 13, 18, and 21, it is unclear if the combined references necessarily “transmit over a broadcast network a notification of the transmission characteristics . . . [comprising] an identification of a transmission network”. In a related art pertaining to video distribution services over multiple networks, the Rakib et al. reference discloses “transmitting over a broadcast network a notification of the transmission characteristics . . . [comprising] an identification of a transmission network” (Figures 9A-E). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made so as to modify the combined references so as to further transmit an identification of a transmission network for the purpose of advantageously providing a means

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to both manage bandwidth across heterogeneous networks and to further provide a means for informing a requesting a subscriber how to particularly receive the requested video-on-demand programming.

7. Claims 3-5, 17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis (US Pat No. 6,766,526 B1), in view of Ellis et al. (WO 99/60790 A1), in view of Rai et al. (US Pat No. 6,438,110), and in further view of Kaplan et al. (US Pat No. 6,016,307).

In consideration of claims 3-5, 17 and 20, the Rai et al. reference in conjunction with determining which network to utilize for content distribution “determines whether there is sufficient available bandwidth in the broadcast network; and if there is not sufficient available bandwidth in the broadcast network . . . determines to transmit the content over a broadband network”. The step of “determining whether there is sufficient available bandwidth in the broadcast network to transmit the content comprises the steps of determining the available bandwidth in the broadcast network, determining the minimum transfer rate for the content; determining whether the minimum transfer rate of the content exceeds the available bandwidth in the broadcast network” wherein “if the minimum transfer rate for the content exceeds the available bandwidth in the broadcast network, then determining that there is not sufficient available bandwidth in the broadcast network to transmit the content and if the minimum transfer rate for the content does not exceed the available bandwidth in the broadcast network, then determining that there is sufficient available bandwidth in the broadcast network to transmit the content” (Rai et al.: Figure 11; Col 7, Lines 48-65).

In connection with the determination of which network link to utilize, the Rai et al. reference is silent with respect to the concept of transmission costs being used in conjunction with routing decisions. In a related art pertaining to the selection of a content transmission network, the Kaplan et al. reference teaches discloses the particular usage transmission costs in addition to other factors should be utilized in connection with making routing decisions between various networks. In particular, the Kaplan et al. reference discloses that the particular decision as to which network to utilize may be based on a number of factors. These factors include “determining available bandwidth” and a comparison between the “cost of transmitting content” between a “broadband” or “broadcast network” whereupon should the “cost of transmitting the content” over one network not exceed the other then the less expensive network is selected all other factors being equal (Kaplan et al.: Col 1, Line 18-27; Col 3, Line 59 – Col 4, Line 12). The determination of the “cost of transmitting the content” on the basis of “determining a cost of transmission per unit of data”, “determining the total number of units of data in the content” and subsequently calculating the “product of the total number of units of data in the content and cost of transmission per unit of data” of one network versus another in order to determine “if the product . . [or total cost of transmission] of data over the broadcast network exceeds the product . . . [or total cost of transmission] of data over the broadband network” (Kaplan et al.: Col 4, Line 12 – Col 7, Line 44). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made so as to modify the Rai et al. routing algorithm with the cost analysis teachings of Kaplan et al. for the purpose of advantageously utilizing a plurality of

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parameters in addition to cost in order to arrive at the optimal routing of data through a network (Kaplan et al.: Col 1, Line 61 – Col 2, Line 15).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as follows. Applicant is reminded that in amending in response to a rejection of claims, the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objections made.

- The Son et al. (US Pub No. 2002/0026645 A1) reference discloses a system and method for distribution of video programming through non-homogeneous networks.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Beliveau whose telephone number is 571-272-7343.

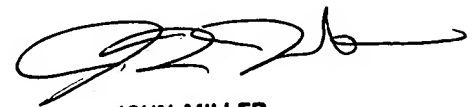
The examiner can normally be reached on Monday-Friday from 8:30 a.m. - 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Scott Beliveau
Examiner
Art Unit 2614

SEB
July 21, 2005



JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600